

Students from local elementary schools help Dean Phil Bailey make magic. (Photos by Chris Greene/ImageWest Photography)

THE MAGIC OF CHEMISTRY CAUGHT ON VIDEO

By Stacia Momburg

"The balloons popping was my favorite part," said fourth-grader Enrique Rico about the Chemistry Magic Show video he watched in his classrrom at Mary Buren Elementary School in Guadalupe on California's Central Coast.

The privately funded video, designed for third-, fourth- and fifth graders, aims to stimulate and excite young students to learn more about science and math. It was sent to each of California's 5,465 public elementary schools and has the potential to be seen by nearly 1.5 million California kids.

The Chemistry Magic Show video and teacher's guide were funded by the Cotchett Foundation and produced in conjunction with Cal Poly.

The video was conceived and funded by Burlingame attorney Joseph W. Cotchett (ENGR '60) and his wife, Victoria, in collaboration with Philip S. Bailey, dean of the College of Science and Mathematics, and his wife, Christina A. Bailey, professor and chair of the Chemistry and Biochemistry Department.

Its purpose is to inspire students to become California's future science and math teachers, technology leaders and innovators.

"This hands-on instructional package will expose students to the wonders of science and mathematics;" said Cal Poly President Warren J. Baker. "It will stimulate noble dreams and ambitions, as well as provide the knowledge and skills for



excelling in college and careers."

The video features Phil and Tina Bailey performing colorful and awe-inspiring chemistry experiments with the help of dozens of fourth-grade students. An accompanying teacher's guide includes brief explanations of the demonstrations and offers directions for additional experiments that could be done in class or at home.

The Baileys have performed chemistry magic show demonstrations for young people for more than 35 years. One recent group was the fourth-grade class of Jaime Cuello (LS '93; M.A. EDUC & ELEM ED CREDENTIAL '98) at Mary Buren Elementary School.

"The kids are really into science now. You can feel the excitement. Their participation in the experiments made the difference – it opened their eyes to the world of science," Cuello said.

"It was cool," Rico said. "We learned a lot about science and chemistry."

Classmate Guadalupe Ayala agrees. "It was fantastic. I think children are going to learn from the video. I've been telling my parents that I want to be a teacher, but I don't know what kind yet."

The Cotchetts have donated \$2 million and bequeathed an additional \$5 million, creating a unique public-private partnership to support science and mathematics teacher education initiatives at Cal Poly.

"We want to motivate our young students, especially those who are disadvantaged, to look to science and math as career paths. We want to inspire their ambitions," said Joe Cotchett.

The 50-minute, professionally produced video is an offshoot of the Cal Poly-Cotchett partnership and was funded separately by the Cotchetts from their other gifts.

"Science and math form a basic understanding of how the world works, which is necessary in every future endeavor – from balancing a checkbook to using computers – as well as understanding consumer products," said Victoria Cotchett.